CLASS V(W) GROUND AMMUNITION TEAMING FOR POM 06

Overview

- Marine Corps Class V(W) Ground Ammunition
- War Reserve Munitions Requirements (WRMR) Modeling Process

What is CBMR ?

“ The Capabilities Based Munitions Requirement (CBMR) is a DoD-wide process governing responsibilities and actions of the DIA, OSD, the CCs, the Joint staff, the Services, and USSOCOM for generating consistent munitions requirements.” documented in DoD Instruction 3000.4”.

1. A given force structure, armed for its assigned military mission.

2. The estimated quantity of munitions required to defeat a specified threat with that force structure.

Total Munitions Requirements (TMR)

- Produced by CG, MCCDC as a result of the Capabilities-Based Munitions Requirements (CBMR) Study (MCO 8000.7)
- Consists of:
  - ✓Combat Requirement (CR)
  - ✓Current Operations/Forward Presence Requirements (CO/FPR)
  - ✓Strategic Readiness Reserve (SRR)
  - ✓Training & Testing Requirement (TTR)
- Program Manager's legal authority to procure ammo

Modeling Provides…

Total Munitions Requirement (TMR) = **War Reserve Munitions Requirement (WRMR)**

(+) **Training Requirement {All Initial & Sustainment}**

(+) **Testing Requirement {DT/OT/Surveillance}**

War Reserve Munitions Requirement (WRMR) → **COMBAT REQUIREMENT (CR) {2 MCOs/3 MEBs (SSCs}**

Current Operations/ Forward Presence Requirement (CO/FPR) {5 MEUs /3 ACMs}

Strategic Readiness Requirement (SRR) {Homeland Defense/ UDP/Treaties/NALMEB}

Combat Planning Factors for…

Total Munitions Requirement (TMR) (-) **Projected Inventory** = **Procurement Objectives**

Combat Planning Factors (CPF's)

- **Currently, CPF's are contained within MCO 8010.1 and utilized operating forces to develop their TPFDD ammo requirements.**

- **There are three different scenario's which can use for planning**

1. Armor Heavy = MCO "A"
2. Infantry Heavy = MCO "B"
3. Composite = 50/50

- **The CPF's are subsequently divided in two categories:**

1. Assault = Developed by TAMCN, by DODIC, per day expenditu the entire plan, then select the most challenging 6 day period fr entire plan and then averaged them out.

2. Sustainment = Developed by TAMCN, by DODIC, per day expe over the entire plan and then averaged them out.

The Modeling Process and Result

Input

- DPG (OSD)
- PTD (CC)
- TPFDD (MarFors)
- TE Assets (TFS)
- Technical Data

Participants

- IPT (AWG & PM's)
- SME (MOS)
- Advocates (HQMC)
- Contractor (Quantics Inc.)

Calculations

Computations using rounds fired to win the war

Results

Combat Planning Factors

- Combat Requirement {2 MCO's, 3 MEB's Small Scale Contingencies}
- Current Operations/ Forward Presence Requirement {5 MEU's, 3 ACM's}
- Strategic Readiness Requirement {Homeland Defense/Treaties/NALMEB}

Yields

War Reserve Munitions Requirements

- *Training Requirement {All Initial & Sustainment}*
- *Testing Requirement {DT/OT/Surveillance}*

Total Munitions Requirement (TMR) **(-)** ***Projected Inventory*** **=** ***Procurement Objectives***

Training and Testing

Total Munitions Requirement (TMR) = **War Reserve Materiel Requirement (WRMR)**

War Reserve Materiel Requirement (WRMR)
- **COMBAT REQUIREMENT (CR) * {2 MCOs/3 MEBs (SSCs}**
- **Current Operations/ Forward Presence Requirement (CO/FPR) {5 MEUs /3 ACMs}**
- **Strategic Readiness Requirement (SRR) {Homeland Defense/ UDP/Treaties/NALMEB}**

(+) **Training Requirement {All Initial & Sustainment}**

(+) **Testing Requirement {DT/OT/Surveillance}**

Total Munitions Requirement (TMR) (-) **Projected Inventory** = **Procurement Objectives**

USMC CBMR COMPONENTS

- **CR = Combat Requirement Summary**

MCO Expenditures - Decisive Defeat = OPLAN = to endex.

MCO Expenditures - Defeat Efforts= OPLAN = tied to a specific Phase of the OPLAN.

SSC Expenditures= Notional MEB sized SSC's coupled with their TO&E, Duration, CPF's.

Combat Loadout = One (1) Combat load for each TAMCN assigned to a specific unit for each specific mission = MCO A & B, and each SSC.

- **CO/FPR = Current Operation/Forward Presence Requirement**

LFORM = Notional MEU TO&E's at the composite assault rate for 15 days plus additional SOC Allowance and CL for each.

Air Contingency MAGTF = One (1) ACM package per MEF supporting an Infantry Bn for 30 days at the Composite Assault rate plus CL for each.

- **SRR = Strategic Readiness Requirement**

Combat Loadout – UDP = (Unit Deployment Program) One (1) CL per assigned TO&E.

NALMEB Requirement = Provided by PP&O.

Homeland Defense Expenditures = Supports 1 Infantry Battalion (CONUS East & West plus OCONUS) for 30 days at the composite sustained rate plus CL.

Title 10 USC. Treaty requirements = As required

Questions

BACK UP SLIDES

Class V(W) Reconstitution

LFORM

5 LFORM Loads
$75M

MPS

2 MPSRONs
$310M

Sustainment

????
Shipped $915M

TRAINING AND TESTING REQUIREMENT (TTR)

- **DoDI Definition: Munitions required to train the force and support Service programs ensuring that weapons and platforms deliver the intended effectiveness (can be stated as an annual requirement, a Future Years Defense Program (FYDP) requirement, and/or projected life cycle of each munition). (TECOM provides)**
- **Surveillance, acceptance testing and production losses of munition items are accounted for in this category. (MCOTEA & MARCORSYSCOM provide)**

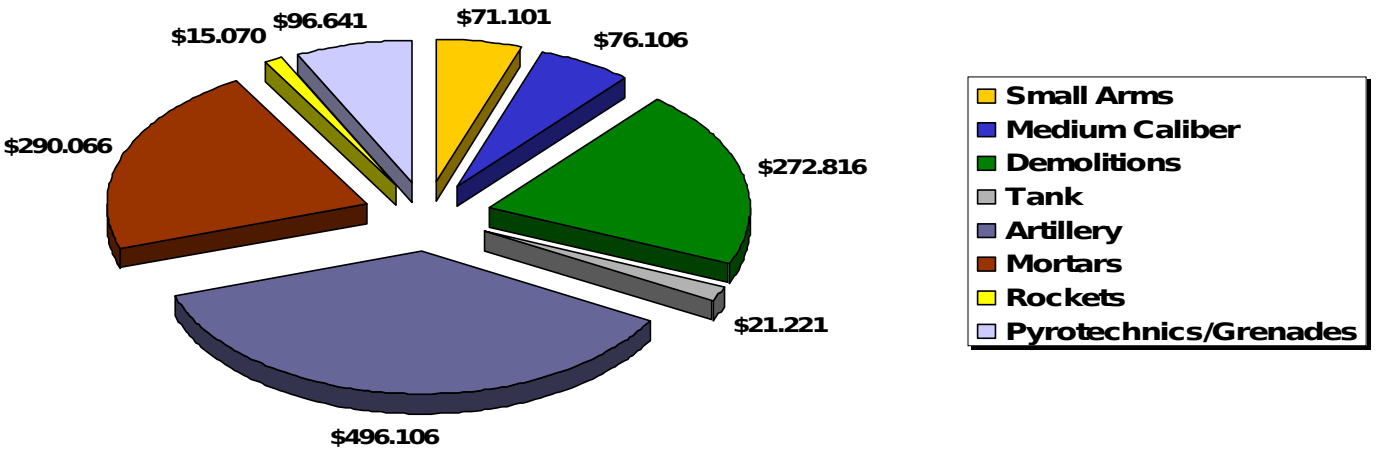
- **Operational Training Requirements: Derived from Marine Corps Orders for individual and unit performance standards.**
  - **Allocations:**
    - ✓ **Published annually in Marine Corps Bulletin 8011.**
    - ✓ **Individual unit allocations based upon personnel/weapons densities.**

Training Requirements Review Process

- Process examples:
  - ✓ TECOM plans to review expenditure data by DODIC by Unit based on the previous three years of expenditures and will compare against computed allowances. Adjusts allocations to units based on previous average expenditures. If increases are recommended a supportability analysis will be performed by MARCORSYSCOM and if supportable published annually in MCBul 8011.
  - ✓ Formal School adjustments are derived through the Course Content Review Board process conducted every 18 months utilizing fleet and MOS SME's from throughout the Marine Corps.

Class V(W) Funding Deficiencie

FY 2003 - FY 2009
AMMUNITION FUNDING DEFICIENCIES



Production Lead Times

The amount of time between contract award and first delivery

Most Small Arms - 13 Months

Most Other Items – 24+ Months

Why so long:

Review of Technical Data Package
Contract Award
FAAT / Qualification
Component Manufacturing
Load Assemble & Pack

Potential Follow On Shortages

1 Year Fix

DODIC	QTY	UNIT COST	TOTAL COST	PRODUCTION LEAD TIME	
MN79	1,729	10,938.34	$18,912,389.86	9	
M456	1,412,251	0.51	$720,248.01	11	
A059	6,932,296	0.37	$2,564,949.52	13	
A064	4,194,558	0.51	$2,139,224.58	13	
B535	27,687	23.09	$639,292.83	13	1 Year Fix
					$24,976,104.80

2 Year Fix

DODIC	QTY	UNIT COST	TOTAL COST	PRODUCTION LEAD TIME	
M131	717,465	4.76	$3,415,133.40	16	
M670*	4,226,713	0.31	$1,310,281.03	16	
M757*	34,309	824.59	$28,290,858.31	16	
G881*	54,808	12.36	$677,426.88	18	
L495	32,583	27.66	$901,245.78	20	
ML25	160	15,353.89	$2,456,622.40	20	
L283	111,578	42.01	$4,687,391.78	22	
D550	3,379	555.51	$1,877,068.29	23	
B567	122,191	17.80	$2,174,999.80	24	2 Year Fix
C870	26,755	346.40	$9,267,932.00	24	$55,058,959.67

Potential Follow On Shortages

Beyond 2 Year Fix

DODIC	QTY	UNIT COST	TOTAL COST	PRODUCTION LEAD TIME	
C484	21,779	343.20	$7,474,552.80	27	
MN08	984,768	3.19	$3,141,409.92	28	
PL87	4,038	50,311.00	$203,155,818.00	NA	
PN16	74	5,568.00	$412,032.00	NA	Beyond 2 Years
PV82	485	5,000.00	$2,425,000.00	NA	$216,608,812.72

How Are We Doing?

- **Current Status:**
  - ✓ "The current state of our ammunition inventory (special emphasis on OIF sourcing and inventories), and any continuing shortfalls"
- **OIF Macro Data Points:** ***$1.1B***

Items Requested:	**143**
Fully Supported:	**135**
Deficiencies: *($0.1B)*	**8**

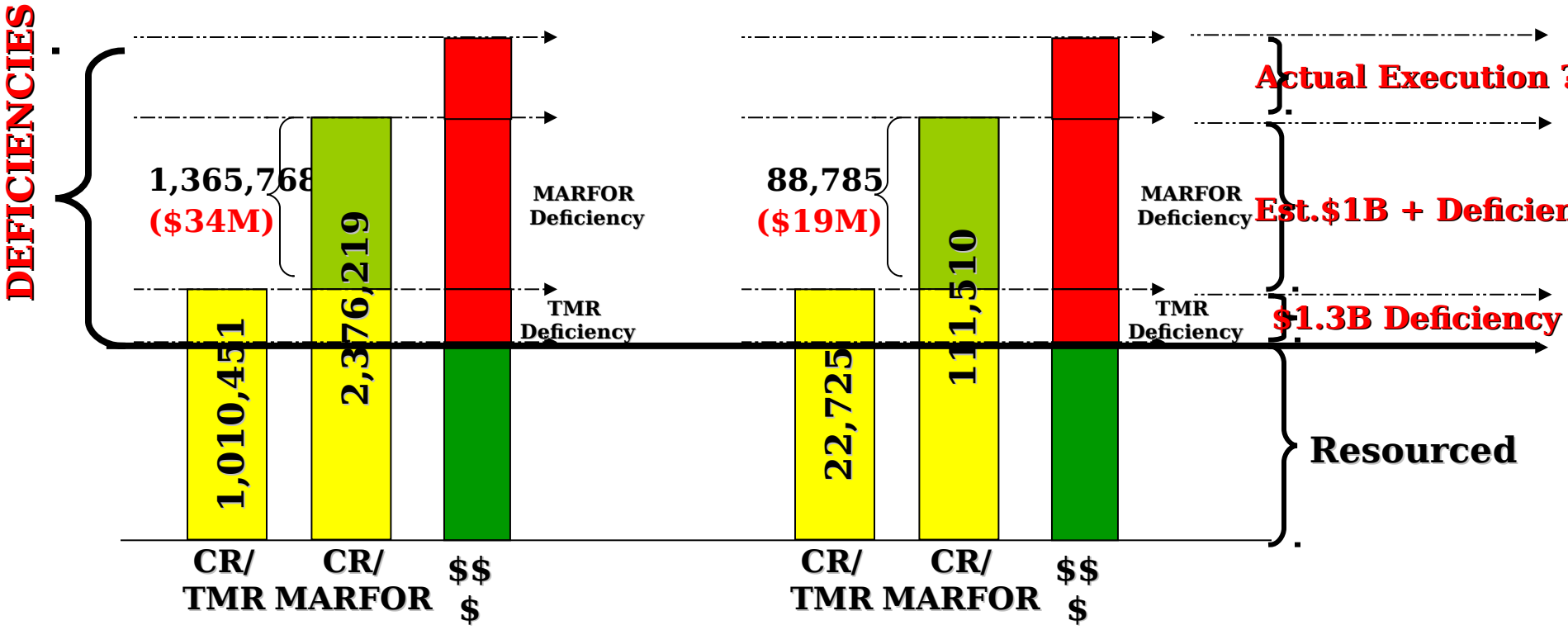
- **MARCENT G4 AMMO "No Show Stoppers"**
  - ✓ Of the 143 requested items, 16 (11 %) were above the USMC publish
  - ✓ Beginning to impact live fire training at current level of support
  - ✓ First indications of "NIS" (USMC ICP to retail ASPs)
    - ❖ HX05-SMAW HEDP, M670-Time Fuse, M766-Igniters

How About The Next Fight?

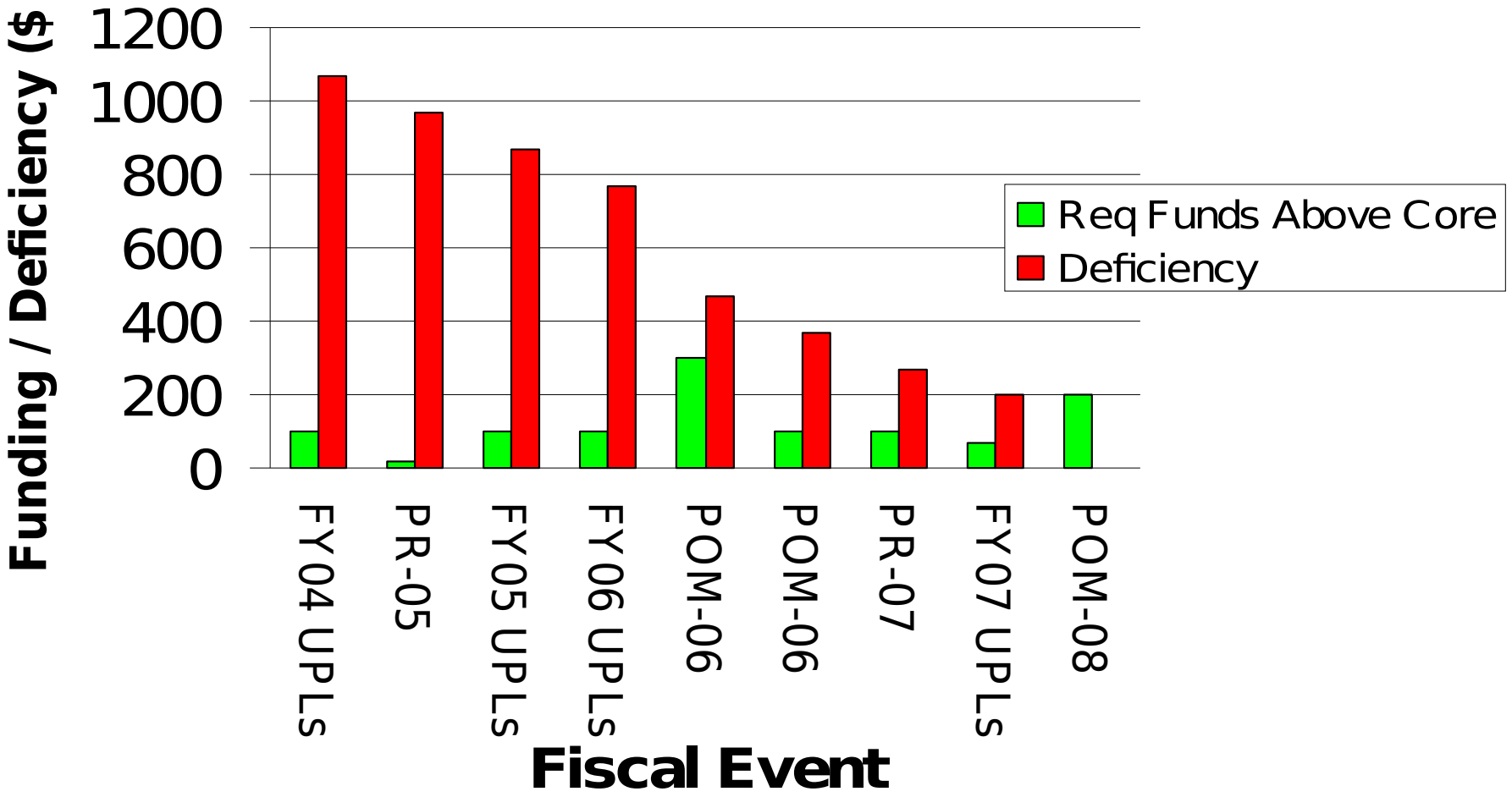
- **Continuing Shortfalls:**
  - ✓ Potential risk (availability of assets) to other USMC commitments
  - ✓ ROM $300M deficiency based on current planning scenario(s)
  - ✓ Details provided to P&R via SIPRNET
  - ✓ For OTHER commitments, a total of 62 items identified by the MARFORs are above the USMC published GR – not

How Did It Happen?

- Significant disparities in Class V(W) requirements (TMR CR vs. MARFOR CR)

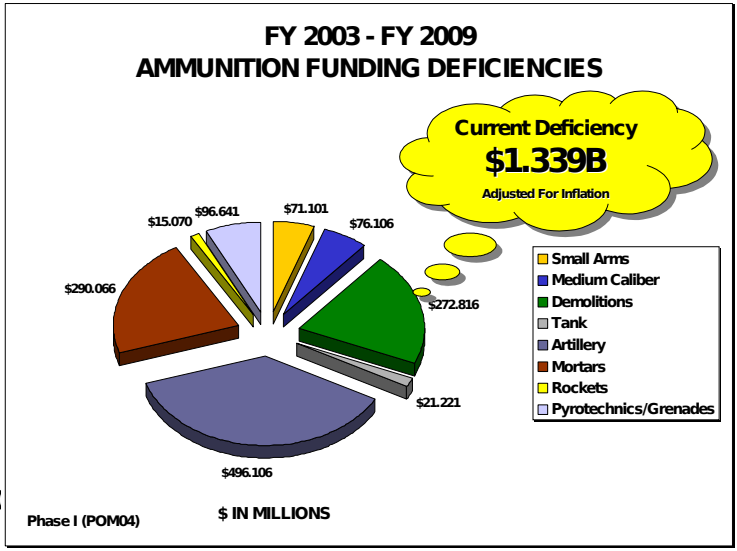


Spread-Loading The Deficienc



Road Ahead

- Current POM04 based deficiency @ $1.3B
  - ✓ Includes unexecutable artillery programs
- DC, P&R influence in FY04 Unfunded Priority List
  - ✓ Directed mod of Ammo UPL's from $27M to $100M
  - ✓ Accommodates the "Ammo Campaign Plan"
- PR05 – $17.2M (60MM HE Mortar):
  - ✓ Accommodates the "Ammo Campaign Plan"
- The Ammo Campaign Plan:
  - ✓ Methodical approach to resourcing ammunition deficiencies across the FYDP.
- Banding Approach:
  - ✓ Developed in coordination with PP&O and tied t Capabilities.



How About Training?

- **Live Fire Training Ammunition:**
  - ✓ FY03 – Generally well (some spot shortages)
  - ✓ In many cases, we have been living off the high(er) investment years
  - ✓ Not fully funded, but generally fully supported – by going to the well!
  - ✓ Estimate $100M annually from the stockpile to support training
- **Training Issues:**
  - ✓ Production leadtimes – “3 year rule”
  - ✓ A dollar today is a “bullet” in 3 years
  - ✓ Little time, if any, to absorb activation of new Structure.
  - ✓ Little time, if any, to absorb allowance Increases. (Back to the well!)